Remarks

- 1) Claims 1-5, 12, 13, 15, 16, 17, 19, 21 are presented, of which claims 1, 12, 17 are independent, each of claims 2-5 depends directly or indirectly on independent claim 1, claims 13, 15, 16 depends directly on independent claim 12, claims 19, 21 depends directly on independent claim 17.
- Please note that the phrases used in the definition of identity software, that is, "with no protection against unauthorised use" in claim 1, third paragraph, line 2 and "with no individual and effective protection ...against unauthorised use" in claim 12, third paragraph, lines 1, 2 are being deleted because they are no longer necessary in the claims as amended and if the identity software as defined by claims 1, 12 as amended is protected against unauthorised use, the authorising software as defined by claims 1, 12 as amended can not discourage the user from enabling or allowing other person(s) to use the protected software or a duplication copy thereof, and this is required by the amended claims 1, 12, for which details will be discussed herein below.
- 3) In the Final Office Action, P.2, item 1c), claims 1-7 and 9-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Ananda(`645).

In support of the rejections, the Examiner states, in the Final Office Action, P.2, item 3, that my arguments (response to First Office Action) filed on 18 Aug., 97 are not deemed to be persuasive for the reasons that a) "the rightful user make copies of ... software available" is probably the most prevalent form of unauthorised software distribution and b) "claim 12 specifies purchase and rental of software program is (as disclosed by Ananda) is merely a time-limited purchase".

The rejections are respectfully traversed.

The independent claims are being amended to better define the invention but without introducing any new issue. After the amendment, the independent

claims 1, 12, 17 claim a software method(claims 1 as amended) or protection software(claim 12 as amended) which comprises authorising software and identity software; or authorising program(claim 17 as amended), stored in a device or existing physically on a medium, for use on a computer to protect other commercial computer software by discouraging a user thereof from enabling or allowing other person(s) to use the protected software or a duplication copy thereof.

The protection software of claim 12 as amended, or authorising program of claim 17 as amended, conforming to or compatible with an existing standard so that they can be used on a computer which also conforms to or compatible with that existing standard and without modification thereof.

The authorising software(claim 12 as amended) or authorising program(claim 17 as amended) being for, when executed, authorising use of the protected software on the computer.

The identity software(claims 1 or 2 as amended) or means for providing(claim 17 as amended) is for providing identity information of that user.

The identity information being for to be authenticated by a remote <u>computing</u> means in order for <u>enabling</u> operation(s) for which that user has to be responsible, <u>to be performed</u>.

Claim 1 as amended, claims a software method comprising steps of: determining the existence of an identity software on a memory means under control of a computer and authorising use of protected software on the computer if the identity software is determined as existing. The existence of said identity software in a memory under control of the computer is being determined without an above-mentioned operation being performed.

Claim 12 as amended, claims a protection software comprising the authorising software and identity software and, in particular, specifies that they are contained in the protection software in such a manner that the authorising software is prevented from being copied therefrom individually; and that the protected software is a

purchased software.

Claim 17 as amended, claims the authorising program and, in particular, specifies that <u>information representative of</u> an encryption algorithm used in the means for providing identity information, exists in the authorising program and being accessible or when the authorising program being executed, usable by <u>the</u> user thereof.

Thus, the present invention as defined by the amended claims is directed to using the existence of material X in a computer, which definition is readable on item 3A herein below, as a precondition for authorising use of the protected software on that computer.

3A) Definition of "material X"

Please note that the identity software (claims 1, 12 as amended) or information representative of an encryption algorithm used in the means for providing identity information (claim 17 as amended) will be referred to as "material X" herein below and reasons therefor will be discussed in details in item 3B herein below.

3B) Whether "material X" is a useful material?

Although material X is capable of being used for providing identity information of a user, for causing operation(s) for which that user has to be responsible, it is actually being used as a material by the present invention as defined by the amended claims, for affecting human behaviour.

Specifically, as the identity information of a user is for causing operation(s) the user has to be responsible for, and a user in general will not copy or provide his/her identity software(claims 1, 12) or means for providing his/her identity information(claim 17), i.e., material X, to someone else, in order to protect himself/herself from having to take the responsibility of operation(s) caused by that someone else, even though the user may do this provided that both of them have a

good enough relationship for him/she to do so. Therefore, material X is capable of affecting human being behaviour in such a way that it is capable of being used as a **psychological barrier** to prevent that user from copying or providing itself or other material inseparable therefrom, to someone else.

Material X is thus analogous to the bait used in a mouse trap, and one example of such a mouse trap is readable on a patent invention entitled "Jar Lid Mouse Trap" issued to La Rue, Date Nov., 23, 1976, patent #: 3,992,802, inwhich a mouse trap for trapping a mouse within a jar is disclosed, and as readable on the abstract, the mouse trap has a bait holder to hold a bait for to be taken by a mouse. As seen, the bait is a material capable of affecting animal behaviour in such a way that it attracts a mouse to get into a mouse trap.

Although the bait is not the patentable subject matter, the issuing of La Rue's patent does show that the Patent and Trademark Office has accepted that the bait is **useful**, and its usefulness make the mouse trap a **useful** device and can thus be patented.

Similarly, material X should also be **useful** because affecting human behaviour(material X) and affecting animal behaviour(material bait) is an immaterial variation.

Further, for many instances, the Patent and Trademark Office has shown that it accepts inventions which make use of psychological barrier, rather than physical barrier, to prevent unauthorised or illegal activities, as useful and can be patented. For one instance, patent #: 5,437,323, entitled: Burglar deterrent decoy, it is disclosed in the abstract that, a decoy consists of a partial face mask with simulated eyes and nose ..mounted...behind a window blind...to produce an illusion that a person is looking out through the window blind to scare away a burglar. For another instance, patent #: 5.358,025, entitled: Fabric garage enclosure, it is disclosed in the abstract that, an enclosure device which can be utilised to cover a garage door opening for

privacy and security. The device includes a fabric portion(which being non-rigid, as readable on claim 1) which acts as a psychological barrier to possible intruders who would be unable to determine if the garage is occupied.

3C) Whether the present invention as defined by independent claims 1, 12, 17, anticipated by Ananda?

The present invention as defined by the amended claims, is directed to making use of the above-mentioned capability of affecting human behaviour of material X, to protect other software, namely as, the authorising software(claim 12 as amended) or authorising program(claim 17 as amended) and the protected software(claims 1, 12, 17 as amended), by using the existence of material X in a computer as a precondition for authorising use of protected software on that computer, and thereby, discouraging a user from enabling or allowing other person(s) to use the protected software or a duplication copy thereof, and this is neither disclosed or suggested or described by Ananda's claims.

It is respectfully submitted that, software is capable of being copied, and it is therefore an important innovative feature of the present invention as defined by the amended claims 1, 12, 17 that to protect software, i.e., authorising software(claim 12 as amended) or authorising program(claim 17 as amended) or protected software(claims 1, 12, 17 as amended) against piracy copying, by means of another software, i.e., the identity software(claims 1, 12) or information representative of an encryption algorithm used in the means for providing identity information(claim 17 as amended), which being contained in a software program, i.e., the authorising program(claim 17 as amended).

Ananda, as readable on all the claims thereof, describes a method of securely renting software, and as readable on claim 1, merely teaches of permitting continuous execution of application software in a first computer if authorisation is obtained from a second computer continuously, and execution will be terminated if otherwise.

Claim 11 claims a similar method and in particular, specifies a rental application comprising a header program for, when being executed, transmitting from the first computer a password verification request comprising a system time, to the second computer, and the second computer will return a dynamic password in response, and the header program terminates the rental application if the dynamic password received does not match another dynamic password it generated using that system time previously. And, the purpose of the invention is readable on col. 23, lines 44-53, "The invention enables ... monitor the time period when a particular application software is executed by a user record the pertinent information regarding the execution of application software for billing and accounting purpose".

There is no software/means in Ananda's claimed invention which can meet the requirement of identity software of claims 1, 12(before and after this amendment) or means for providing identity information of claim 17(before and after this amendment). Ananda's claims merely mention of a password verification request comprising a system time and there has no description in Ananda's claims as to whether user's identity has to be authenticated and if it has to be, in what way this should be done.

3D) Whether the present invention as defined by independent claims 1, 12, 17, could be met, if a prior art identity software/means for providing identity information, was to be applied to Ananda?

3Di) Claim 1 as amended

It should be noted that the purpose of Ananda's rental system is to, as mentioned above, "monitor the time period when a particular application software is executed by a user ...for billing and accounting purpose". Therefore, if a prior art identity software was to be applied to Ananda's rental system for providing identity information of a user, then that identity information should be for to be authenticated

by the second computer, in order that rental payment can be made from that user's account or the user can be billed thereafter, which being operation(s) for which that user has to be responsible and is a must for the second computer to return an authorisation(i.e., the dynamic password) in response thereto.

Therefore, the requirement of claim 1 as amended, that is, "determining the existence of identity software on a memory means of a computer but in determination of the same, operation(s) for which that user has to be responsible, is not being performed, and authorising use of the <u>protected</u> software on the computer if the identity software is determined as <u>existing</u>", and on which it can be readable that claim 1 as amended requires "authorising use of the <u>protected</u> software without causing operation(s) for which that user has to be responsible", and this is not met by Ananda.

The present invention as defined by claim 1 as amended can provide protection to purchased software and rental software by <u>discouraging a user thereof</u> from enabling or allowing other person(s) to use the protected software or a <u>duplication copy thereof</u>, after payment being made.

3Dii) Claim 12 as amended

Even if a prior art identity software was to be applied to Ananda's rental system, and be included into the header program as an inseparable part thereof, so that the requirement of claim 12 as amended, that is, "the authorising software and identity software are contained in software in such a manner that the authorising software is prevented from being copied therefrom individually" is being met. The resulted rental system could still not meet claim 12 as amended, for the following reasons:

It is respectfully submitted that, it is not readable on Ananda's document that "the rental of software program" as disclosed therein is merely a time-limited purchase.

And, it is readable on the "OXFORD ENCYCLOPAEDIC ENGLISH

DICTIONARY" that, "purchase" means "acquire by payment" or "buy", whereas "rent" means "payment for use of a service, equipment, etc.". Accordingly, rental of a program can only be regarded as a purchase of right of time-limited use thereof, and the ownership thereof is not being transferred. And, to purchase a program of limited using time or to purchase the right of time-limited use of a program(i.e. rent) are completely different, in the former case the purchaser obtains the ownership of the program, although it may not be usable after a predetermined period of time, and in the latter case, the purchaser merely obtains the right of limited use and should return the program to its owner thereafter.

Further, as readable on independent claims 1, 8, 11 of Ananda, the rental software will be terminated on a first/user computer if authorisation or the like is not obtained from a second/remote computer. In other words, whether a user can continue to use a rental software or not depends on whether the user can obtain further authorisations or the like from the second computer which being not under his/her control, and therefore, even if the claimed software was not being indicated as "rental", it could not be a purchased software because a owner should have the right to use his/her software without authorisation from other party.

Ananda patent, as discussed above, is directed to using the second computer to "monitor the time period when a particular application software is executed by a user for billing and accounting purpose", and there has no description in Ananda's claims which suggests or discloses that use of the software can be permitted without authorisation(s) from the second computer or the second computer should be under complete control of the user to provide the authorisation(s), so as to protect purchased software, and "protection of purchased software" as required by claim 12 as amended is not being met by Ananda.

3Diii) Claim 17 as amended

Even if a prior art means for providing identity information, was to be applied to Ananda's claimed rental system, the present invention as defined by claim 17 as amended, cannot be met, for the following reasons:

It is not possible for one with ordinary skill in the art to use an encryption algorithm used by a prior art means for providing identity information, in Ananda's authorising program, i.e., the header program, for generating encrypted commands to authorise use of protected software, as required by claim 17 as amended. For the reason that, the prior art means was to be used by the user himself/herself unlimitedly and without restriction, and if the same algorithm was to be used for authorising use of protected software, then the prior art means could be used as an authorising means for authorising use of the protected software unlimitedly and with no restriction, and the rental software could not be protected from unauthorised use so as for receiving rental payment.

On the other hand, if the same encryption algorithm was to be used by the prior art means for providing identity information, and by the header program for generating encrypted commands to authorise use of protected software in the rental system resulted, then in Ananda's authorising program, i.e., the header program, that same algorithm should not be accessible or when the header program being executed, usable by a user, otherwise the user might use it for authorising use of the protected rental software unlimitedly and without making any payment therefor. The requirement of claim 17 as amended, that is, "Information representative of the algorithm for providing identity information exists in the authorising program and being accessible or when the authorising program being executed, usable by the user thereof", so as to discourage the user from copying the authorising software to other person, as mentioned above, is not being met by Ananda's header program.

Finally, there has no description in Ananda's claims which suggests or discloses "including information representative of an encryption algorithm used by a

prior art means for providing identity information, in a prior art authorising program such as Ananda's header program, and having that <u>information representative of</u> an encryption algorithm to be accessible or usable by <u>the</u> user <u>thereof</u>", as that required by claim 17 as amended, but that algorithm is not the algorithm being used for authorisation of use of the protected software.

Accordingly, withdrawal of the rejections of independent claims 1, 12, 17 and their dependent claims 2, 3-5, 13, 15, 16, 19, 21 under 35 U.S.C. 102(e) as being anticipated by Ananda(`645) are respectfully requested.

4) In the final office action, item 2a, claims 1, 2, 3-5, 12, 13, 15, 16, 17, 19, 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner states that, "The claims are full of grammatical errors and dangling clauses which make the scope of the claims, indeterminate."

The rejections are respectfully traversed. The independent claims and dependent claims are being amended to eliminate grammatical errors and dangling clauses therein, so as to make the scope of the claims determinable.

Accordingly, withdrawal of the rejections of claims 1, 2, 3-5, 12, 13, 15, 16, 17, 19, 21 under 35 U.S.C. 112, second paragraph, are respectfully requested.

5) In the final office action, item 2b, claims 1, 2, 3-5, 12, 13, 15, 16, 17, 19, 21 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The Examiner states that "the claims replete with indefinite and functional or operational language" and also that "the structure which goes to make up the device must be clearly and positively specified" and further that " The structure must be

organised and correlated in such a manner as to present a complete operative device" and further that "For examination purpose, the claimed invention is understood as a software method".

The rejections are respectfully traversed. The Examiner incorrectly interprets the invention as defined by independent claims 12, 17 as a computer base device. And, independent claim 1 has been amended as a software method.

As mentioned herein above in item 3B that, the identity software(claims 1, 12 as amended) or information representative of an encryption algorithm(claim 17 as amended) is a useful material capable of affecting human being behaviour in such a way that it make that user tends to protect it from being used by someone else.

Claim 1 has been amended to present a useful software method with well-defined steps therein and claims 12, 17 as amended present protection software(claim 12 as amended) or authorising program(claim 17 as amended) which is also a useful material because it includes a useful material X therein, and has a well-defined composition.

Thus, the requirement of 35 U.S.C. 112, second paragraph is being met by claims 1, 12, 17 as amended.

Accordingly, withdrawal of the rejections of claims 1, 2, 3-5, 12, 13, 15, 16, 17, 19, 21 as amended under 35 U.S.C. 112, second paragraph, are respectfully requested.

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Respectfully submitted,

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